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Information Management and the Administration of Justice

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While the importance of accurate, complete, and timely information to the administration of justice cannot be disputed, outmoded information systems and inadequate crime and criminal justice data have only rarely generated concern among public officials. The pressing problems of criminal justice policy makers in the mid-1980s are issues such as prison and jail overcrowding, the police use of deadly force, services for victims of crime, and sentencing policies. The direct and indirect ties between these problems and the quality of criminal justice information systems are not always evident. Yet information is the lifeblood of the administration of justice.

Executive and legislative policy makers are beginning to recognize the many ties between criminal justice administration and information management. In recent years, the strengthening of information systems has emerged as a strategy to improve the operation of the criminal justice system. Common sense suggests that the availability of more accurate and complete information when making bail or parole release decisions will improve the quality of these decisions.

Policy makers also know that the successfulness of criminal justice program initiatives may hinge on the availability of data. Many alternatives to incarceration programs, for example, rely on data gathered in presentence investigations to identify the offenders who are not threats to the community. Conversely, selective incapacitation initiatives depend on computerized criminal history records to isolate the career criminals.

Flowing from its recognition of the importance of information to the administration of justice, New York State has engaged in a major overhaul of its criminal justice information systems. The underlying premise of this project is that improved information management will enhance the administration of justice. In addition to providing better information for the day-to-day operational and resource allocation decisions in the criminal justice system, the information systems im-

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provements are expected to produce significant benefits for research, planning, and evaluation activities. While it is hoped that these improvements will have further payoffs in terms of public safety, it is clear that any connection between information management and public safety is complex and difficult, if not impossible, to unravel.

The purposes of this paper are to describe New York State's efforts to upgrade criminal justice information systems, and through this account, to direct attention to some of the difficult questions in criminal justice information policy. Before reviewing New York's experience, it is important to acknowledge the legacy of studies and recommendations that have provided impetus and guidance for these developments.

The Impetus for Change: Federal Involvement

The Federal government's involvement in assessing criminal justice information systems and in supporting their development has been substantial. In 1931, the U.S. National Commission on Law Observance and Enforcement (the Wickersham Commission) decried the lack of data on crime and criminal justice, calling "accurate data . . . the beginning of wisdom" (1931:3). The Wickersham Commission recommended the development of a comprehensive plan for crime and criminal justice statistics at federal, state, and local levels.

The President's Commission on Law Enforcement and Administration of Justice in 1967 examined the role of information technology in correcting problems in the administration of justice. Information management was linked to crime control. "Safe streets," the Commission contended, "require knowledge of what is happening in our streets, who is causing the trouble, what happened there before, and many other facts" (1967a:123). The necessity of information for research and evaluation was also emphasized: "Information about the consequences of actions by the criminal justice system is essential for improving those actions" (1976b:2).

Following the President's Commission's reports, the Omnibus Crime Control and Safe Streets Act of 1968 established the Law Enforcement Assistance Administration (LEAA) to administer block grants and to help the States improve the administration of justice. One of LEAA's priorities was the upgrading of criminal justice information systems at the state and local levels. LEAA followed the President's Commission's recommendations and "gave relatively high priority to grants for the development of computerized criminal justice information and statistical systems in the states . . ." (Office of Technology Assessment, 1982:34). A concern that the States receiving

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Federal funding would develop independent and incompatible programs led LEAA to fund a project to aid states in the development of standardized computerized criminal offender data files. This organization was called Project SEARCH (System for Electronic Analysis and Retrieval of Criminal Histories, later Search Group, Inc.). New York State was one of the original states included in Project SEARCH.

In 1971, LEAA appointed and funded the National Advisory Commission on Criminal Justice Standards and Goals to formulate "national criminal justice standards and goals for crime reduction and prevention at the state and local levels" (1974a:v). After two years of study, the National Advisory Commission (1974b:37) concluded that:

> One of the biggest obstacles to improve the criminal justice system has been the lack of information regarding its present operation . . . Although progress has been made, many often-expressed needs for information have yet to be satisfied.

As part of its strategy to reduce crime, the National Advisory Commission set forth a series of specific guidelines for the development and implementation of criminal justice information systems.

The U.S. Department of Justice's Bureau of Justice Statistics currently provides assistance to the States in bettering information systems. Federal involvement in advancing criminal justice information systems at the State and local levels, therefore, has been long-standing and considerable.

Studies in New York

In recent decades, a series of reports have documented the serious shortcomings in New York's crime and criminal justice data systems. The conclusions and recommendations of these studies spurred the current efforts to improve criminal justice information systems in the State.

In 1964, Governor Rockefeller proposed a major crime control program that would include a statewide criminal justice information system. Legislation the same year created the New York State Identification and Intelligence System (NYSIIS), for the purposes of coordinating criminal justice information in the State and facilitating the sharing of information among various criminal justice agencies. Seven years later the State of New York Legislative Commission on Expenditure Review (LCER) conducted a program audit of the State's criminal justice information system, including NYSIIS. The 1972 LCER report stressed the impact on information system development of the fragmentation of criminal justice agencies. "Most agencies,"

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the LCER observed, "have developed in a context of operational autonomy . . . voluntary cooperation among separate branches of government is a constraint on the coordination of information." (1972:S-5) The LCER found that, "Despite years of effort and millions of dollars expended, it must be concluded that the combined efforts of the criminal justice agencies of New York State have not yet brought about a total criminal justice information system." (1972:6)

The Assembly Codes Committee in 1980 wrote a report, aptly entitled *Too Little, Too Late,* that was critical of the lack of progress in the development of a "unified, comprehensive, statewide criminal justice information system" (p. iii). The Codes Committee report directed attention to the failure of various state agencies to cooperatively plan an Offender Based Transaction Statistics/ Computerized Criminal History (OBTS/CCH) system. The savings that would result from an information system spanning the criminal justice process were emphasized by the report. It also underscored the value of information to decision makers. The OBTS/CCH system "would enable the executive, legislature and state agencies to make rational, responsible and cost-effective decisions" regarding the criminal justice system (New York State Assembly Codes Committee, 1980:ii).

Another major criticism of New York's criminal justice information systems came in 1982 from the Executive Advisory Commission on the Administration of Justice (the Liman Commission), a temporary commission established by Governor Carey to make recommendations for achieving better coordination among various criminal justice agencies. The Liman Commission took note of "the pernicious consequences of a hydra-headed criminal justice system," documented the "haphazard" information system development and the resulting "wasteful duplication of effort" (1982:5, 34). An IBM study of New York's systems, appended to the report, labeled them a disaster. Information systems had been developed by individual criminal justice agencies, with little or no concern as to whether information could be passed from one agency to the next. The Liman Commission recommended that the new Governor appoint a criminal justice administrator, responsible for overall criminal justice planning, program development, and coordination, and charged with integrating criminal justice information systems within the executive branch. The report included a recommendation that a director of criminal justice information be jointly appointed by the Chief Judge and the Governor "to integrate criminal justice information reposing within those separate branches of government" (1982:14).

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Several studies, then, attributed the flaws in New York State's criminal justice information systems to a lack of coordination among criminal justice agencies. While this fragmentation among agencies is probably the best explanation for gaps and inadequacies in systems, there are at least two other factors to consider. First, many agency information systems, especially the older ones, were designed poorly. Little consideration was given to the information supplier, who, in most instances, is the criminal justice practitioner: the police officer, the jail administrator, the district attorney, and so forth. Workers on the local level were required to complete tedious forms for the entry of data into a state system that in return provided no benefit to them. Not surprisingly, the data were often inaccurate and incomplete.

A second factor to consider is that over the years criminal justice systems in the state have not been adequately funded. Although for years private industry has treated information as a vital corporate resource, in the public sector information management has been regarded as an auxiliary activity. Expenditure data verify this. In 1982 only 1.4 percent of the total criminal justice expenditures in New York were for information management.

The Information Systems Improvement Project

One of my first tasks as Governor was to appoint a Director of Criminal Justice. Among other responsibilities, the Director was charged with the task of overseeing the development of integrated state-of-the-art information systems linking all components of the criminal justice system. In the summer of 1983, under the auspices of the Director of Criminal Justice and with support from the Legislature, a Criminal Justice Information Systems Improvement Task Force was formed.

The overriding goal of this project is to improve the state's criminal justice information systems. To achieve this goal, the Task Force followed a five step process. The first step involved a thorough description of current criminal justice information systems in terms of their nature, system inputs and outputs, and mechanisms used to exchange information. The second step consisted of an evaluation of the strengths and weaknesses of the existing systems through a survey of system users and operations. Third, a system improvement plan was developed, incorporating the best features of existing systems, as well as improvements for acknowledged deficiencies. The drafting of budget proposals to secure the resources necessary to implement the plan was the fourth step. Fifth, a detailed set of tasks, activities, and time-tables to implement the plan was developed.

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A central feature of the Task Force process has been the widespread involvement of criminal justice practitioners. The Task Force began its work by forming teams in functional areas of criminal justice—statewide support systems, police, prosecution, courts, communications, parole, probation, jails, and corrections. These teams consisted of Task Force staff and over one hundred state and local criminal justice professionals, including "hands-on" workers in each functional area. The redesign efforts were, therefore, structured in such a way as to produce immediately foreseeable payoffs to the information suppliers, thereby engaging their cooperation.

Another key to the success of the Task Force's effort is that it has not been one in which a grand "Master Plan" was produced, dictating the top-down redesign of all information systems. Rather, the approach has consisted of incremental improvements in existing systems, coupled with the development of consensus recommendations by the various criminal justice agencies for the coordinated growth and integration of their information systems.

The initial work of the Task Force, an eighteen-month study conducted to describe and evaluate existing systems, was the most thorough examination of information systems in the state's history. This study documented the serious impact of independent and incompatible criminal justice agency information systems. On the administration of justice, as indicated above, the underlying assumption of the Information Systems Improvement Project was that improved information management would enhance the administration of justice. The expectations were that improved information systems will: 1) improve the quality of operational decision-making; 2) eliminate waste and duplication of effort; and 3) upgrade research, planning, and evaluation activities.

It is interesting to review some of the findings of the eighteen-month Task Force study in light of these three subgoals.

Operational Decision Making

Information is essential for the daily decision making that determines the flow of cases through the criminal justice system. The "system" is not a true system, of course, but a series of interconnected decision points—from the decisions at the arrest, charging, plea and bail stages, through to the sentencing and parole release stages. At least in theory, improved information about criminal offenders should yield better decisions across these decision points; i.e., career criminals will be correctly identified for prosecution, bail will not be set at inappropriately high or low levels, offenders who are not threats

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to the community will be targeted for program alternatives to incarceration, and so forth.

The Task Force study revealed a number of critical defects in the information provided for making these decisions. In some cases, the information provided was inaccurate or incomplete. For example, New York State law requires the court to review the defendant's prior criminal record during arraignment. This information comes from files maintained by the State Division of Criminal Justice Services (DCJS) in Albany. Because of incompatibilities between DCJS and court information systems, approximately one-quarter of the arrest records on criminal history reports are missing court dispositions. Arraignment decisions, therefore, are frequently made with an incomplete picture of the defendant's prior record. Moreover, the criminal history records are vital throughout the criminal justice system. The Task Force study revealed that probation, parole, and corrections officials spend countless hours collecting information from local courts to complete criminal history records.

In other instances, the issue is not the accuracy or completeness of the data, but its timeliness. The Task Force team that investigated State Division of Parole information systems reported several instances of failure to provide the necessary information in a timely manner. For example, information regarding the release of an inmate was often not provided by the institutional parole staff to the field parole office soon enough for the parole officer to plan for the inmate.

Many other illustrations of the negative impact of inaccurate, incomplete, or late information on the operational decision making in the justice system were documented in the course of the Task Force study. Some of these routine decisions are made by front-line workers (e.g. parole officers) whose need for accurate and timely information (e.g. warrants) is immediately related to public safety concerns.

It is expected that advancements in information systems, by enhancing decision making, will produce some increase in the effectiveness of the criminal justice system. However, it is impossible to quantify the degree to which routine, operational decision making will be improved by upgrading the quality of information provided to decision makers. Nor can it be guaranteed that, when provided with more complete and accurate information, decision makers will always use this information as a basis for their decisions. It cannot be argued, for example, that improvements in the quality of information available to decision makers will necessarily lessen the extent to which extralegal variables (such as income, race, sex) may be taken into account in making charging, bail, sentencing, and other decisions.

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Cost

The administration of justice is a major public expense. New York State currently spends over $4 billion a year on law enforcement, the courts, and corrections. The decision to make a substantial fiscal commitment to improvements in criminal justice information system was based, in part, on the realization that such an investment would produce significant long-term savings.

There are several ways in which information system improvements can produce savings. Cost reductions will result from the elimination of duplicative data collection efforts among agencies. Many New York State studies, including the Information Systems Task Force effort, have identified instances of several independent criminal justice agencies expending large amounts of time and money collecting the same information (e.g., the court disposition data collected by DCJS, as well as by probation, parole, and correctional workers).

Another source of savings is related to the existence of unnecessary or poorly designed paperwork *within* agencies. For example, outdated information systems and overlapping state and federal reporting requirements have burdened law enforcement, probation, and parole officers with data recording responsibilities. Some of this record keeping is unnecessary. The Task Force study revealed instances in which parole officers routinely kept multiple records of contacts with their cases. Probation officers spend up to one-third of their time doing paperwork, time that might be better used supervising clients.

A third savings factor is less obvious but perhaps more crucial over the long run. This factor involves the relationship between the management of resources within agencies and the broader goals of the criminal justice system. An example from the Task Force study illustrates this issue. Incarceration is the most resource intensive portion of the criminal justice system. New York currently spends nearly a billion dollars a year to incarcerate 35,000 inmates in its prison system. Inmates are housed in facilities of different security levels according to the threat to society that they pose. This Department of Correctional Services (DOCS) classification is based, to a large extent, on the information contained in criminal history records. If records are missing information and there is some question about appropriate level of security, inmates are placed in more, rather than less, secure facilities. The Task Force study revealed that because of incomplete criminal histories, DOCS places up to 20 percent of inmates in more secure, and hence more expensive, facilities than may be necessary.

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This example suggests that two critical, interrelated problems result from a lack of complete criminal history data at classification. First, the dollar cost of inappropriate classification may be considerable. Second, a gap is produced between the goals and the reality of the DOCS classification system. Placement at higher levels of security than necessary for community protection defeats the purpose of a classification system and may frustrate efforts at rehabilitation.

Issues of cost and efficiency arise at every point in the criminal justice system. Virtually all agencies complain of money and staff shortages. Cost-effectiveness can never be the primary criterion of justice; however, fiscal constraints are very real. Our multi-year investment in information technology of more than $20 million will more than pay for itself in savings in the years to come.

Research, Planning, and Evaluation

The third broad area of information need includes data on crime events, criminal offenders, and system processing that are vital for research, planning, and evaluation activities. Public officials are continually examining alternative strategies for improving the administration of justice. While policy choices are inevitably affected by a host of factors, decision makers are increasingly relying on statistical data to guide policy. Research, planning, and evaluation units in various criminal justice agencies have come to play a significant role in providing information to decision makers.

Valid and reliable data are necessary to answer a number of questions. Information regarding the nature, magnitude, and trends in the crime problem is crucial for criminal justice planning decisions. Public officials and citizens alike are interested in the cost of crime and criminal justice. Information regarding the success or failure of individuals in various correctional programs and alternatives is essential for planning and program development.

The Task Force study revealed that in New York, currently available data support the generation of only aggregate statistics for research and policy analysis. The study showed that even when data are available from a particular agency, they are often not consistent with numbers from other sources. For example, crime and indictment statistics maintained by DCJS often differ from those produced by local police departments or district attorney's offices. Inaccurate, inadequate, and conflicting data have impaired two recent, essential policy studies in New York: the projection of prison populations, and the development of sentencing guidelines.

It is anticipated that upgrading the quality of crime and criminal

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justice data will enhance the administration of justice in the long-term by enriching the data available for research, policy, and planning activities.

The Next Step

The result of the Task Force study was a comprehensive set of recommendations to improve the flow of information between criminal justice agencies and to increase the accuracy, completeness, and timeliness of the information among criminal justice agencies. Probably the most critical component of this is the development and acceptance of a plan that describes how information should be exchanged among state and local agencies. Through the state budget process, the resources to implement this plan have been given to the Director of Criminal Justice.

The improvement plan develops a criminal justice information system through a three-pronged approach of: 1) improving systems in state agencies through the acquisition of new computers and the redesign of information systems; 2) supporting the spread of automation in local agencies through the development of public domain software; and 3) developing a statewide data communication network that will permit the automated transfer of data among state and local criminal justice agencies.

Issues of Concern to Policy Makers

In the process of completing the eighteen month Task Force examination and then planning for the long- and short-term systems improvements, a number of questions related to information policy have been raised. These are complex issues and will not be addressed here in an exhaustive manner. However, by focusing on these issues, posed in the form of questions, its hoped that dialogue will continue as advancements are made in information technology.

Will improvements in criminal justice information systems enhance public safety? Elected officials are prone to sell program initiatives in criminal justice on the basis of presumed public safety payoffs and conversely, are quick to attribute decreasing crime rates to crime control initiatives. However, the relationship between public safety and the administration of justice is intricate and difficult to decipher. It is hard to substantiate the claim that improvements in criminal justice information systems will produce direct and significant public safety benefits. At the same time, it does make sense that improving the accuracy and timeliness of information provided to decision makers

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will produce some marginal, albeit difficult to measure, crime control payoffs.

The Task Force study of parole, for example, has resulted in several specific proposals that should have immediate community protection benefits. One such innovation entails the development of a system to provide parole officers with more timely information on parolees' contacts with law enforcement agencies. Another new system is aimed at increasing the efficiency of the parole revocation process. The link between each of these systems and the improved performance of parole functions is quite clear. The systems may also be expected to enhance community protection by getting potentially dangerous criminals off the streets, although this effect is less direct.

All of this puts the policy maker in the uncomfortable position of not knowing whether she or he should emphasize the anticipated public safety benefits of information systems initiatives. In New York, the multiyear plan for improving criminal justice information systems is called "Systems Improvements for Enhanced Community Safety" or SIFECS. It is recognized, however, that any evaluation of this project will examine the effects of information systems improvements on criminal justice system performance, not rates of crime.

How and where is the balance struck between the state's need to gather and store information and the individual's right to privacy? This may be less pressing an issue in criminal justice information policy than it was a decade ago. Nevertheless, many specific questions remain and new issues arise as advancements are made in information technology.

What kind of information should be stored and what should be purged? For example, in New York, arrests that do not result in conviction are purged from criminal history records, but this is not a uniform practice across the states Office of Technology Assessment (1982). Who should have access to files, and/or information from the files? For example, should potential employers have access to criminal histories? What if the potential employer is a child day care center?

Which criminal offenders should be included in the information systems? Particular caution should be exercised with respect to the inclusion of records of juvenile delinquency. Yet the confidentiality of juvenile records must be balanced against the need of the state for criminal history information in subsequent adult proceedings. Professor Franklin E. Zimring has written that the upgrading of juvenile records that would be required to guarantee fairness in adult selective incapacitative sentencing decisions would be extensive (1984). Noting

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that redesign would go "far beyond traditional concerns about privacy and confidentiality," Zimring explains that, "[O]ne would have to reformulate the processes and the mission of the juvenile court . . ." (1984:15).

In New York the Information Task Force conducted an exploratory study of the current state of juvenile justice information systems, but any plans to investigate more closely and to redesign these systems will not be made until the current SIFECS project, dealing with adult records, has been completed.

What are the sources of resistance to improvements in criminal justice information systems? To promote change, how can this resistance by minimized? Recently Professor James Q. Wilson identified several reasons why the criminal justice system may be resistant to the improvement of information systems, even though individually its members believe that more information is better than less information (1984). One reason is that criminal justice workers are largely case-oriented practitioners, "in the business of processing people, not processing information" (Wilson, 1984:19). Wilson points to the importance of designing systems that have a direct, daily payoff to working members of the criminal justice system. This approach was central to the Task Force improvements in New York State. For example, teams assigned to work in various functional areas devoted considerable attention to reducing or redesigning paperwork requirements.

Improved information systems facilitate the development of performance measures and the monitoring of agencies and professionals in criminal justice. Wilson points out that another source of resistance to improvements is fear of being held accountable. Judges, for example, may fear accusations of being "soft" on crime. Probation or parole officers may be apprehensive about the possible negative repercusions of case contact monitoring. It may be impossible to eliminate this fear of accountability. However, it can be demonstrated to criminal justice practitioners that improved information systems will make certain aspects of their jobs easier. This may, in turn, generate cooperation.

How does the state elicit the cooperation of local level criminal justice agencies in the improvement of criminal justice information? The notion of resistance is related to this larger question. Most criminal justice data are generated by local agencies. For example, local police agencies report arrest data. Mechanisms must be developed to involve local agencies in the collection and transmittal of complete, timely, and accurate information.

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As indicated above, the Task Force in New York has attempted to elicit the cooperation of local level data suppliers through the involvement of information users, that is, criminal justice practitioners, in the development of recommendations. The contrast between two Task Force team experiences illustrates the importance of user involvement.

Local jails are monitored by the State Commission of Correction (SCOC), and are required to report significant amounts of data to the SCOC. The Task Force team in the local corrections area was comprised of six sheriff's deputies and one representative from SCOC. Because of this group composition, most of the recommendations developed by this team focused on streamlining the data reporting requirements of SCOC and developing systems that benefit the local sheriff. Already this team has installed a system to expedite the "boarding out" of local inmates by providing a centralized database of available jail cells. This team is also redesigning SCOC reporting forms to minimize the paperwork of local sheriffs.

The probation area team had a very different experience. The State Division of Probation monitors local probation in much the same manner as the SCOC monitors local jails. Initially, the probation team consisted almost entirely of personnel from the State Division of Probation who had little actual probation experience. As a result, the recommendations from this team ignored the burden placed on local probation offices by outmoded data reporting requirements. In fact, the team recommended additional reporting requirements. It was not until the team's recommendations were presented to an advisory panel of probation officials that the team realized the potential impact of their recommendations on local operations.

It is presumptuous to expect that the transfer of information technology will mend all problems with relations between state and local level criminal justice agencies. Yet cooperation on the local level is essential to the state's efforts to develop criminal justice information systems.

How can the Executive Office ensure the cooperation of all criminal justice agencies? This is another difficult area that involves relationships among the different agencies in the criminal justice system. The judiciary, for example, is an independent branch of government and cannot be compelled by the executive branch to participate in redesign efforts. How can the executive branch make clear to the judiciary the apparent benefits of participation in a comprehensive criminal justice information system?

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The Task Force study did not evaluate court information systems. The Office of Court Administration (OCA) in the state is independently reviewing and upgrading its information systems. The SIFECS project is working to strengthen this executive-judiciary relationship by funding a missing disposition data collection project, and by facilitating the computerized reconciliation of the CCH file in DCJS and OCA files. However, until the executive branch agencies work more effectively with OCA, a truly comprehensive information system will not be developed.

These are only some of the complex questions in criminal justice information policy. With the rapid and accelerating growth in information technology, it can be expected that issues such as these will continue to challenge policy makers in the coming years. Additionally, information management will probably increase in importance as a strategy to enhance the administration of justice.

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